IN THE CLAIMS

Please amend the claims as follows:

Claims 1-58 (Canceled).

59. (New) An isolated human postnatal deciduous dental pulp multipotent stem cell.

60. (New) The stem cell of claim 59, wherein the stem cell can differentiate into a neural cell, an adipocyte, or an odontoblast.

61. (New) The stem cell of claim 59, wherein the stem cell can express STRO-1, CD146, ALP, matrix extracellular phosphoglycoprotein LF155, basic fibroblast growth factor, endostatin, or any combination thereof.

62. (New) The stem cell of claim 59, wherein the stem cell can express CBFA1, ALP, MEPE, BSP, DSPP, or any combination thereof following mineralizing induction.

63. (New) The stem cell of claim 59, wherein the stem cell can express CBFA1, Osterix, Osteocalcin, or any combination thereof following induction with BMP-4.

64. (New) The stem cell of claim 59, wherein the stem cell can express nestin, βIII-tubulin, glutamic acid decarboxylase, neuronal nuclei, glial fibrillary acidic protein, neurofilament M, 2',3'-cyclic nucleotide-3'-phosphodiesterase, or any combination thereof following neural induction.

65. (New) A stem cell of claim 59, wherein the cell is transfected with a nucleic acid segment.

66. (New) A non-human mammal comprising a cell according to claim 59.

67. (New) A method to generate bone in an organism comprising implanting at least one human postnatal deciduous dental pulp multipotent stem cell into the organism.

68. (New) The method of claim 67, wherein the stem cell is implanted after mineralizing induction or induction with BMP-4.

69. (New) The method of claim 67, wherein the stem cell induces a recipient cell to produce bone.

70. (New) The method of claim 67, wherein the recipient cell is an osteoblast or an osteocyte.

71. (New) The method of claim 67, wherein the stem cell is implanted to reduce or ameliorate trauma within the organism.

72. (New) The method of claim 71, wherein the trauma is a bone degenerative disease or a physical injury.

73. (New) The method of claim 72, wherein the bone degenerative disease is osteoporosis.

74. (New) The method of claim 72, wherein the physical injury is due to joint replacement, hip replacement, or root canal.

75. (New) The method of claim 67, wherein the stem cell has been expanded ex vivo.

76. (New) The method of claim 67, wherein the stem cell is implanted in combination with a

carrier.

77. (New) The method according to claim 76, wherein the carrier comprises hydroxyapatite, tricalcium phosphate, or hydroxyapatite and tricalcium phosphate.

78. (New) A method to produce human neural tissue comprising implanting at least one dental stem cell into an organism.

79. (New) The method of claim 78, wherein the dental stem cell is a dental pulp stem cell or a human postnatal deciduous dental pulp multipotent stem cell.

80. (New) The method of claim 78, wherein the dental stem cell is implanted following neural induction.

81. (New) The method of claim 78, wherein the dental stem cell is implanted into neural tissue contained within the organism.

82. (New) The method of claim 78, wherein the dental stem cell is implanted to reduce or ameliorate neural trauma within the organism.

83. (New) The method of claim 82, wherein the neural trauma is a neural degenerative disease or a physical injury.

84. (New) The method of claim 83, wherein the neural degenerative disease is Alzheimer's disease or Parkinson's disease.

85. (New) The method of claim 78, wherein the dental stem cell is expanded ex vivo.

86. (New) A method to produce human adipose tissue comprising implanting at least one

dental stem cell into an organism.

87. (New) The method of claim 86, wherein the dental stem cell is a dental pulp stem cell or a human postnatal deciduous dental pulp multipotent stem cell.

88. (New) The method of claim 86, wherein the dental stem cell is implanted following adipocyte induction.

89. (New) A method to generate dentin comprising implanting a human postnatal deciduous dental pulp multipotent stem cell into an organism.

90. (New) A method to generate dentin comprising

a. contacting pre-existing dentin with a dental stem cell, and

b. incubating the pre-existing dentin and the dental stem cell to produce treated dentin.

91. (New) The method of claim 90, wherein the dental stem cell is a dental pulp stem cell or a human postnatal deciduous dental pulp multipotent stem cell.

92. (New) The method of claim 90, wherein the pre-existing dentin is contacted with the dental stem cell in vivo or in vitro.

93. (New) The method of claim 90, wherein the pre-existing dentin is contained within a tooth.

94. (New) The method of claim 90, further comprising washing the treated dentin with a fluid.

95. (New) The method of claim 91, wherein the fluid is water, a biological solvent, or a

biological buffer.

96. (New) The method of claim 90, wherein further comprising washing the pre-existing dentin with an acid solution or a base solution.

97. (New) The method of claim 96, wherein the acid solution is selected from the group consisting of acetic acid, phosphoric acid, formic acid, sulfuric acid, hydrochloric acid, hydrofluoric acid, hydroiodic acid, nitric acid, or hydrobromic acid.

98. (New) The method of claim 96, wherein the acid solution has a concentration of between 0.01 % and 100 % acid.

99. (New) The method of claim 96, wherein the base solution comprises a base selected from the group consisting of sodium hydroxide, potassium hydroxide, or ammonium hydroxide.

100. (New) The method of claim 96, wherein the base solution has a concentration of between 0.01 % and 100 % base.

101. (New) The method of claim 90, wherein dentin is generated in response to trauma to the tooth.

102. (New) The method of claim 101, wherein the trauma is a root canal.